Bikeability refers to how well the design of a building and associated policies, education, and promotion work together to support people who ride bicycles.

HUB Cycling's preliminary Bikeability Assessment Report for Park Royal consists of:

- 1. A scored report of the complex and the amenities that it offers in support of cycling;
- 2. Recommendations for policies to enhance rider experience;
- 3. Practical recommendations for improving your development's bikeability;
- 4. Suggestions for improvements in the surrounding cycling network and its interaction with the Park Royal site.

Rating	Score	Adj Score (No Policies)
Platinum	39 - 40	30 - 31
Gold	27 - 38	20 - 29
Silver	14 - 26	11 - 19
Bronze	1 - 13	1 - 10

Section #	Section Title	Max Score	Park Royal South	Gateway Residences
1	Location	6		
1.1	Bike Score	4	3	3
1.2	Comfortable Routes	2	2	2
2	Storage Infrastructure	8		
2.1	Class B Spaces	2		
2.2	Class A Spaces	3		
2.3	Bike Storage Design	2		
2.4	Bike Storage Security	1		
3	Connections	4		
3.1	Exterior	2		
3.2	Interior	2		
4	Facilities	9		
4.1	End of Trip Facilities	3		
4.2	Lockers	2		
4.3	Other	1		
4.4	Repair Space	1		
4.5	Bike Pump	1		
4.6	Bike Stand/Tools	1		
5	Support	2		
5.1	Sustainable Options	1		
5.2	Shared Bikes	1		
6	Policies and Practices	9	NA	NA
6.1	Survey	1	NA	NA
6.2	Events and Promotions	2	NA	NA
6.3	Engagement	2	NA	NA
6.4	Education	2	NA	NA
6.5	Resources and Communication	2	NA	NA
7	Bonus	2	NA	NA

1.1 Bike Score:

Score based on following chart:

Max Score: 4

Bike Score	Point value for BFB
0 - 19	No Points
20 - 49	1 point
50 - 69	2 points
70 - 89	3 points
90 - 100	4 points

Bike Score represents an independent assessment of the relative cycle-friendliness of a buildings' surrounding area. Four equally weighted categories combine to give a score out of 100. Scores are moderated by their distance from the starting point.

- Infrastructure
- Hills
- Destinations & Connectivity
- Bicycle Mode Share

See www.walkscore.com for details.

Generally, the number of different types of use found within Park Royal to a degree inflate the bike score of the area.

Gateway Residence scores very well at 86 points, indicating that the area is very Bikeable, and that cycling is convenient for most trips.

Park Royal S, Score: 3

1.2 Comfortable Route Density: Represents lane km (10 min ride from site property) of bikeways that would be comfortable for most users.

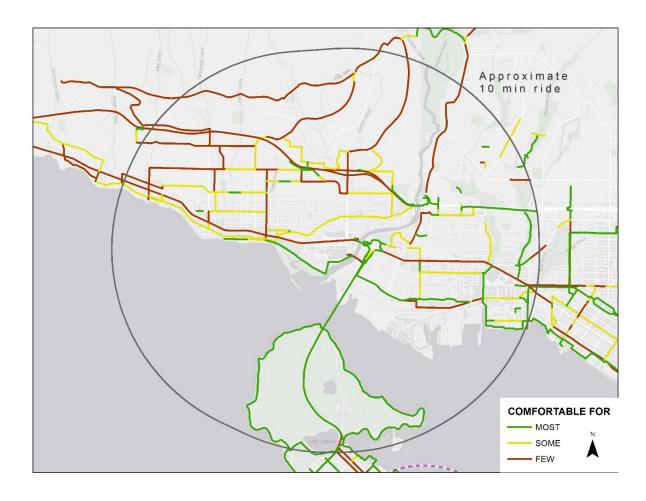
Max Score: 2

BFB Point Value	Lane km of "Comfortable for	
	Most" Routes	
0.5	10 - 19 km	
1.0	20 - 24 km	
1.5	25 - 29 km	
2.0	> 30 km	

Park Royal scores tremendously high on this measure, predominantly due to the presence of the Seawall and Lions Gate Bridge within the 10 min ride area. In reality, the best north-south connection is on the eastern edge of the ridable area along Bewicke and through in Mosquito Creek Park in North Vancouver. East-west, the Capilano-Pacific Trail links directly into the Park Royal site, and makes connections to the Spirit Trail in North Vancouver.

Park Royal S, Score: 2.0

Gateway Residences, Score: of 2.0



2.2 Number and quality of outdoor Class B (Visitor) spaces;

Short-term bike parking spaces for employees and visitors evaluated by the number of recommended spaces satisfied, and effective use of space."

Max Score: 2

District of West Vancouver Bylaw specify a short term bicycle parking requirements of the following:

Townhouse or apartment, 0.2 spaces per dwelling

Commercial and Institutional, 0.4 spaces per 100m2

Using these numbers, Park Royal South and its approximately 800,000 sqft of retail space (74,322 m2) would require approximately 298 exterior visitor spaces. This requirement seems excessive, particularly since the equivalent requirement in City of Vancouver would be a minimum of 6 spaces. We believe that Park Royal South's 64 spaces should be adequate until bicycle access to and circulation within the site is improved. West Vancouver additionally requires that a minimum 50% of short term bike parking be sheltered from the elements. At Park Royal, over 50% of short-term parking is currently sheltered from the elements.

For the Gateway residences, the 298 residential units by WV code would require 60 exterior spaces. CoV requirements put the number of exterior spaces at a much more manageable 12 spaces (6 for residential, and 6 for commercial). Plans provided to HUB Cycling have no presence of exterior bike parking spaces indicated.

Park Royal S, Score:

Gateway Residences, Score:

Gateway Commercial and Offices, Score:

2.3 Number and quality of indoor spaces:

Bike parking spaces for tenants and visitors evaluated by percentage of the number of recommended spaces satisfied, and effectiveness of space use."

Max Score: 3

Secure bike parking requirements from WV specify the following.

Townhouse or Apartment, 1.5 spaces per dwelling

Commercial or Institutional, 0.3 spaces per 100m2

29,588/100*.3= 89 spaces

Park Royal South has 0 secure bike parking spaces provided for customers, employees, or visitors to the site at present. We would expect an estimated 223 secure spaces under WV bylaws, or an estimated 219 under COV bylaws.

The Gateway Residences site with its 298 residential units, would expect 447 spaces for resident use + 89 additional spaces for the 29,588 square feet of commercial <u>and office</u> space on the ground floor. Proposed bike spaces are <u>estimatedexpected</u> to be 403. This is less than what is required by the bylaw, hence Park Royal's reduced score.

City of Vancouver's bylaws for residential units are based on unit size, so-based on the information provided so far, HUB cycling cannot make an estimate for the Gateway Residences using CoV bylaws.

Park Royal S, Score: 0

Gateway Residences, Score: <u>1.5</u>2

Gateway Commercial and Office, Score: 1.5

2.4 Bike Storage Design:

Indoor and outdoor bike parking and access to bike parking conforms with design guidelines in the Building Bylaws"

Max Score: 2

Park Royal South, while it has no secure spaces, the location and design of the short terms spaces meets design standards. are well enough done. More than 50% of these spaces are covered from the elements, and most are in high traffic locations or directly adjacent to mall entrances.

Old Plans,

For the Gateway Residences, all bike rooms are under forty spaces, which is the maximum required without further segmentation of the interior rooms. Designs do not indicate the ratio of horizontal or vertical spaces, nor whether any of these spaces are expected to be bicycle lockers.

We would hope and expect that the designs of the spaces would follow basic Vancouver guidelines, with no more than 30% of spaces as vertical spaces, a combined 60% maximum of vertical or stacked spaces, and a minimum of 10% bike lockers.

Additionally, with the <u>steep hillsheavy grades</u> of the North Shore, <u>Park Royal this area</u> should expect a higher <u>percentageproliferation</u> of e-bikes in the coming years. CoV requires an electrical outlet for every Class A (secure) bicycle parking space, and that should be considered an absolute minimum for the site.

Park Royal S, Score: <u>.5</u>1

Additional security features (cameras, fob access et cetera)"

Max Score: 1

All Park Royal S bike parking locations are simple racks, with no additional security measures in place. (need to check if any of these locations are covered by security cameras.)

For the Gateway Residences, access to the individual bike parking rooms are doors, though the exact method (key, FOB, code) is unclear. HUB cycling suggests FOB entry is used for entry, with all doors on automatic openers.

We also suggest, at minimum, that the entry-ways into bike rooms are covered by video camera. Footage should be reviewable in case of theft or damage. Should you wish to go further and have camera coverage in each room, we suggest signage to make users aware of that fact as you enter. This serves as an additional deterrent to thieves and vandals.



(Bentall Centre Bike Parking Signage)

Park Royal S, Score: 0

Gateway Residences, Score: unclear

Gateway Office and Commercial, Score: unclear

3.1 Connections between bike parking and exterior

There is no physical requirement for the transition from the exterior of the building to Class A bike storage beyond the idea of 'direct access to outside'. However, best practices suggest that the access be intuitive, convenient and minimize the time required to access parking from the exterior.

Max Score: 2

For Park Royal S, there is no secure bike parking available. Connections to the bike network are of variable quality.

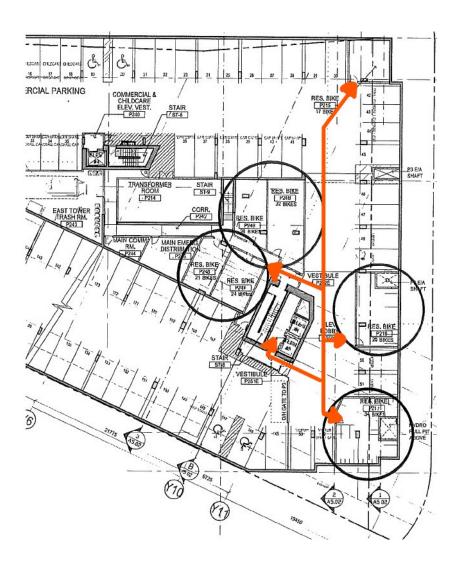
For Gateway access to secure bike parking is unclear from the designs provided.

Score for both Gateway and Park Royal is unclear:

3.2 Connections between bike parking and interior units

Design conforms with recommended best practices"

Max Score: 2



Old plans For the Gateway Residences, access to the interior elevators are pretty direct from the bike rooms. Residents should have an easy connection back to their units. The two towers will self select bike rooms that are close to their elevator connections, so each tower will have a number of bike rooms which are preferred by their residents.

4.1 End of Trip Facilities:

Showers + change room space + change room design conform with recommended best practices"

Max Score: 3

Park Royal S, no designated End of Trip area, but employees <u>have</u> access to multiple bathrooms on site. Individual employers may provide break rooms or change facilities.

Old version of plans Gateway Residence planss show; End of trip facilitiesy with direct access to commercial elevators and bike rooms designated for commercial use. Specifics in regards to number of showers, fixtures and toilets is unclear. CoV designates these requirements based on ratios of Class A (Secure) bike parking spaces that are non-residential use. It is unclear if the District of West Vancouver has explicit requirements for their end of trip areas.

Park Royal S, Score: unclear

Gateway Residences, Score: unclear

4.2 Clothing Lockers:

Number and design conform with recommended best practices" Max Score: 2

In CoV, clothing lockers are required at a rate of 1.4 x # of class A spaces required (non-residential components).

Park Royal S, Score: <u>Ounclear</u>

Gateway Residences, Score: unclear

4.3 Other amenities:

E.G.: clothes air-drying area, mechanical clothes dryer, hair dryer, paper towels, tissues, bike wash

Max Score: 1

Unclear.

Park Royal S, Score:

4.4 Repairs:

Designated covered space for repairs" Max Score: 1

No designated bike repair room indicated in Gateway Residences. HUB expects that for a development of this size, each tower should include a repair area with bike stand, basic tools, and a bike pump.

Park Royal S, Score: 0

Gateway Residences, Score: unclear

4.5 Bike pump Max Score: 1

Park Royal S, Score: 0

Gateway Residences, Score: unclear

4.6 Bike stand / tools Max Score: 1

Park Royal S, Score: 0

Gateway Residences, Score: unclear

5.1 "Complementary sustainable transportation options supported: E.G.: car share, proximity to regular / bike accessible transit such as frequent bus routes, Skytrain" (0.5 point for fast charging station)

Max Score: 1

Park Royal is the major bus exchange point for North Vancouver. Both sites have EV chargers available for use.

Park Royal S, Score: 1

Gateway Residences, Score: 1

5.2 Shared bikes

Any Shared bikes available for resident or employee use?

Max Score: 1

Cycling without age is provided space within Park Royal south for to park their trishaw. This service provides free of charge rides for those who are mobility challenged.

Park Royal S, Score: 1

Bike Friendly Policies

Max Score: 9

No Score Assigned

6.1 Survey:

Building Transportation Survey was conducted in last 12 months, or will be conducted before the Bike Friendly Business Awards"

Max Score: 1

The nature and level of demand for cycling amenities is changing relatively quickly in <u>Metro</u> Vancouver. Regular surveys of needs / preferences for cycling amenities help inform decision-making for future changes.

6.2 Events and Promotion:

Bike to Work Week or comparable city cycling event participation

Max Score: 2

Building management and employers should promote opportunities for building tenants to participate in urban cycling events, such as HUB Cycling's Bike to Work Week and Bike the Night. Strata may also profile opportunities for tenants to gain cycling knowledge through HUB Cycling inperson and on-line instruction. HUB can offer promotions and discounts for memberships and event participation.

6.3 Engagement:

Cycling committee/ discussion list

Max Score: 2

Having organized cycling committees, cycling clubs, or related groups such as environmental committees, provides ongoing positive support, messaging, and community building for cyclists. Consider a building-wide <u>Slack channel</u> to <u>support communication and continue</u> engagement.

6.4 Education:

Building cycling education / workshops"

Max Score: 2

Having access to education and skill-building supports current cyclists to be better prepared and safer, and can enable some people to commute by bicycle. Information such as this will help tenants become aware of the bike routes in the local area. HUB can offer education workshops that include an introduction to the neighbourhood bike network and focusing on defensive cycling techniques.

6.5 Resources and Communication:

Cycling commuting information and resources provided to new tenants and is readily available for all tenants in written format"

Max Score: 2

Building orientation and other building communications can specifically highlight bike parking and amenities, and indicate where to find resources such as bike maps and cycling education.

Information such as this will help tenants become aware of the numerous options for bike routes in the local area. We recommend that Strata provide notice boards near available bike parking that includes a printed map showing the bike network and destinations within a 10 min ride.